



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/760,574

01/20/2004

Eric Robert Bechhoefer

BFM-01702

1048

26339

7590

07/01/2005

PATENT GROUP

CHOATE, HALL & STEWART

EXCHANGE PLACE, 53 STATE STREET

BOSTON, MA 02109

EXAMINER

CHARIOUI, MOHAMED

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

FE

**Office Action Summary**

Application No.

10/760,574

Applicant(s)

BECHHOEFER ET AL.

Examiner

Mohamed Charioui

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 181-210 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 181-185, 187-197 and 199-210 is/are rejected.
- 7) ☒ Claim(s) 186 and 198 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2857

1. Applicant cancelled claims 1-180.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 181-185, 187-197 and 199-210** are rejected under 35 U.S.C. 102(b) as being anticipated by Bjork et al. (U.S. 5,128,619).

**As per claims 181, 183, 187, 193, 195, 199 and 201-210**, Bjork et al. teach processing a received waveform in accordance with signal propagation modeling in said wire producing a processed waveform (see col. 5, line 66 to col. 6, line 40); fitting each of a plurality of functions to a portion of data points representing the processed waveform (see col. 2, lines 5-12); determining a characteristic (i.e. derivative) of each of the plurality of functions (see col. 2, lines 12-14); evaluating the characteristic of each of the plurality of functions at data points representing the processed waveform (see col. 2, lines 12-16); and detecting an event using the characteristic of each of the plurality of functions (see col. 2, lines 16-25). Regarding claim 193, Bjork et al. further teach a computer program product to perform the claimed invention (see col. 2, lines 40-63 and col. 7, lines 22-33).

**As per claims 182 and 194**, Bjork et al. further teach compensating the received waveform prior to fitting a plurality of functions (see col. 6, lines 15-30).

**As per claims 184 and 196**, Bjork et al. further teach storing data of the waveform in accordance with the event detected (see col. 7, line 66 to col. 8, line 35).

**As per claim 185 and 197**, Bjork et al. further teach classifying the event (see col. 5, lines 55-66).

**As per claims 188-192 and 200**, Bjork et al. further teach determining at least one peak using characteristic that exceeds the event detection threshold (see col. 6, line 66 to col. 7, line 46); storing data corresponding to the at least one peak (see col. 7, lines 55-66); and classifying the data as one of a plurality of events (see col. 7, line 66 to col. 8, line 35).

***Allowable Subject Matter***

3. **Claims 186 and 198** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of record teaches or suggests that the portion of data points has  $N+M+1$  data points,  $N$  representing a number of data points prior to a first one of said data points included in said portion,  $M$  representing a number of data points after the first one of the data points included in said portion, and determining a first of the plurality of functions in accordance with the  $N+M+1$  data points.

***Response to Arguments***

4. Applicant's arguments filed 4/7/05 with respect to claims 181 and 193 have been fully considered but they are not persuasive.

Applicant argues that Bjork et al. do not teach processing a received processing a received waveform in accordance with signal propagation modeling in said wire producing a processed waveform.

Examiner disagrees with the Applicant argument because Bjork et al. discloses this limitation (see col. 5, line 66 to col. 6, line 40).

As result of further review, Bjork et al. reference is now used against the dependent claims 182-185, 187-192, 194-197, 199 and 200.

**Contact information**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Charioui whose telephone number is (571) 272-2213. The examiner can normally be reached Monday through Friday, from 9 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2857

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohamed Charioui

10/29/04

